

COMPRESSOR DEFINITION

Designation	EM C66CLT
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	701RA77

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Low Back Pressure		
4.1 Evaporating temperature range	-35°C to -10°C	(-31°F to 14°F)	
5 Motor type	RSCR		
6 Starting torque	LST - Low Starting Torque		
7 Expansion device	Capillary tube		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	Static	187 to 255 V	-
8.2 LBP (43°C Ambient temperature)	Static	187 to 255 V	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	6.9	[kgf/cm ²] (98 psig)	/ °C - °F
9.2 Peak	7.8	[kgf/cm ²] (111 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	10.61	[cm ³] (0.647 cu.in)
2.1 Bore [mm]	26.000	
2.2 Stroke [mm]	20.000	
3 Lubricant charge	150	[ml] (5.07 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO5	
4 Weight (with oil charge)	8.2	[kg] (18.08 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	PTC	
2.1 Starting device	MI2021/V230	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	4(350)	[µF(VAC minimum)]
5 Motor protection	AE15BU	
6 Start winding resistance	20.91	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	15.10	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	6.71	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	1.09	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	1.35	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			ASHRAE LBP-NOFAN Static		Evaporating temperature (Condensing temperature		-23.3°C (-9.94°F) 54.4°C (129.92°F)	
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
625	158	183	102	0.46	1.96	6.16	1.55	1.81

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		ASHRAE32-NOFAN Static				(Condensing temperature 35°C (+95°F))			
Evaporating temperature	Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35 (-31)	368	93	108	69	0.35	1.15	5.31	1.34	1.56
-30 (-22)	496	125	145	79	0.38	1.55	6.27	1.58	1.84
-25 (-13)	646	163	189	89	0.42	2.03	7.28	1.84	2.13
-20 (- 4)	822	207	241	99	0.46	2.58	8.34	2.10	2.44
-15 (+ 5)	1027	259	301	109	0.51	3.23	9.43	2.38	2.76
-10 (+14)	1264	319	370	120	0.56	3.99	10.52	2.65	3.08

TEST CONDITIONS: @220V50Hz		ASHRAE32-NOFAN Static				(Condensing temperature 45°C (+113°F))			
Evaporating temperature	Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35 (-31)	345	87	101	69	0.35	1.08	4.98	1.25	1.46
-30 (-22)	469	118	137	80	0.39	1.47	5.81	1.47	1.70
-25 (-13)	616	155	180	92	0.44	1.93	6.71	1.69	1.96
-20 (- 4)	790	199	231	103	0.49	2.48	7.63	1.92	2.24
-15 (+ 5)	993	250	291	116	0.55	3.13	8.57	2.16	2.51
-10 (+14)	1230	310	360	129	0.61	3.88	9.51	2.40	2.79

TEST CONDITIONS: @220V50Hz		ASHRAE32-NOFAN Static				(Condensing temperature 55°C (+131°F))			
Evaporating temperature	Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35 (-31)	304	77	89	71	0.35	0.95	4.33	1.09	1.27
-30 (-22)	423	107	124	84	0.40	1.33	5.06	1.28	1.48
-25 (-13)	566	143	166	97	0.46	1.78	5.84	1.47	1.71
-20 (- 4)	737	186	216	111	0.52	2.31	6.64	1.67	1.94
-15 (+ 5)	938	236	275	126	0.59	2.95	7.44	1.88	2.18
-10 (+14)	1172	295	343	142	0.66	3.70	8.23	2.07	2.41

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		ASHRAE32-NOFAN Static			(Condensing temperature 65°C (+149°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	(-31)	277	70	81	69	0.35	0.87	4.01	1.01	1.17
-30	(-22)	389	98	114	84	0.40	1.22	4.64	1.17	1.36
-25	(-13)	527	133	154	99	0.47	1.65	5.31	1.34	1.56
-20	(- 4)	693	175	203	116	0.54	2.18	6.00	1.51	1.76
-15	(+ 5)	891	225	261	134	0.62	2.81	6.68	1.68	1.96
-10	(+14)	1123	283	329	153	0.70	3.54	7.34	1.85	2.15

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	Yes		
3 Connectors			
3.1 SUCTION	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42° up + 45° to Back		
3.2 DISCHARGE	4.94 +0.08/-0.08	[mm]	(0.194" +0.003"/-0.003")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted 0° up + 45° to Back		
3.3 PROCESS	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 45° up + 45° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		